

9/16/04

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* * * * * * * * * * * Welcome to STN International * * * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in CA/CAplus
NEWS 5 FEB 05 German (DE) application and patent publication number format changes
NEWS 6 MAR 03 MEDLINE and LMEDLINE reloaded
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 8 MAR 03 FRANCEPAT now available on STN
NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN
NEWS 10 MAR 29 WPIFV now available on STN
NEWS 11 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA
NEWS 12 APR 26 PROMT: New display field available
NEWS 13 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field available
NEWS 14 APR 26 LITALERT now available on STN
NEWS 15 APR 27 NLDB: New search and display fields available
NEWS 16 May 10 PROUSDDR now available on STN
NEWS 17 May 19 PROUSDDR: One FREE connect hour, per account, in both May and June 2004
NEWS 18 May 12 EXTEND option available in structure searching
NEWS 19 May 12 Polymer links for the POLYLINK command completed in REGISTRY
NEWS 20 May 17 FRFULL now available on STN
NEWS 21 May 27 STN User Update to be held June 7 and June 8 at the SLA 2004 Conference
NEWS 22 May 27 New UPM (Update Code Maximum) field for more efficient patent SDIs in CAplus
NEWS 23 May 27 CAplus super roles and document types searchable in REGISTRY
NEWS 24 May 27 Explore APOLLIT with free connect time in June 2004

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
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NEWS WWW CAS World Wide Web Site (general information)

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STRUCTURE FILE UPDATES: 27 MAY 2004 HIGHEST RN 686710-55-4
DICTIONARY FILE UPDATES: 27 MAY 2004 HIGHEST RN 686710-55-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

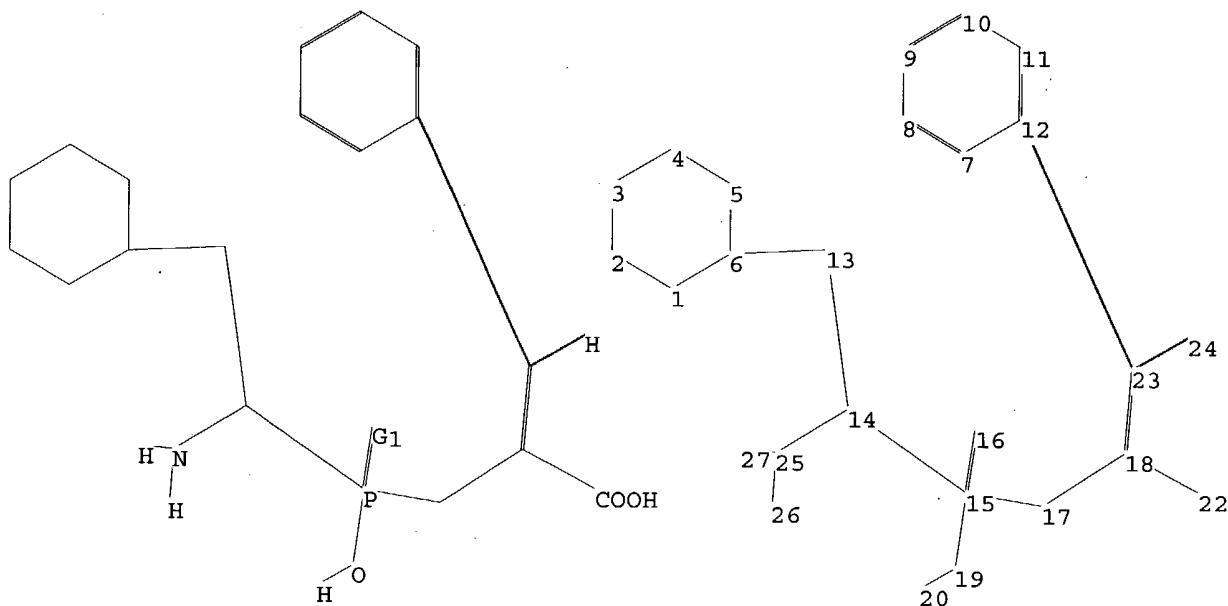
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
Uploading C:\Stnexp4 corrupted\QUERIES\10627991.str

9/16/04



chain nodes :

13 14 15 16 17 18 19 20 22 23 24 25 26 27

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

6-13 12-23 13-14 14-15 14-25 15-16 15-17 15-19 17-18 18-22 18-23 19-20
23-24 25-26 25-27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-25 15-16 15-19

exact bonds :

6-13 12-23 13-14 14-15 15-17 17-18 18-22 18-23 19-20 23-24 25-26 25-27

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

G1:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

L1 STRUCTURE UPLOADED

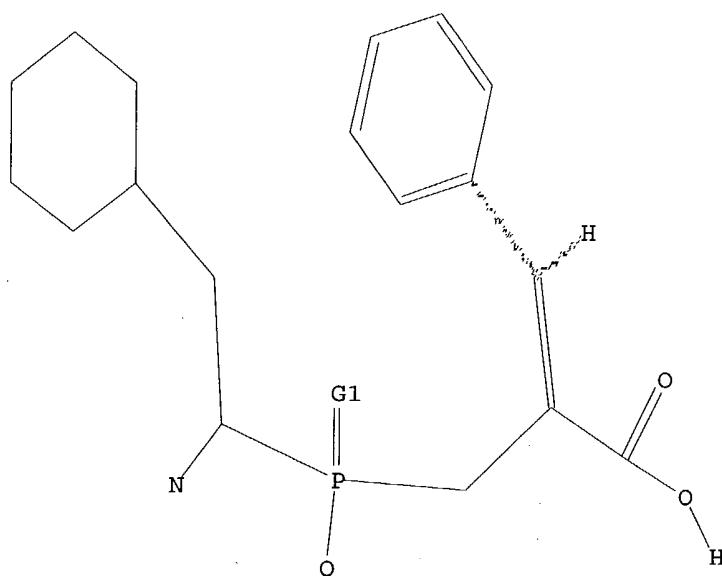
=> d l1

L1 HAS NO ANSWERS

L1 STR

10627991

9/16/04



G1 O,S

Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 16:16:22 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3 TO 163
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 ful
FULL SEARCH INITIATED 16:16:27 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 46 TO ITERATE

100.0% PROCESSED 46 ITERATIONS 21 ANSWERS
SEARCH TIME: 00.00.01

L3 21 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
155.42 155.63

FILE 'CAPLUS' ENTERED AT 16:16:30 ON 28 MAY 2004
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FILE COVERS 1907 - 28 May 2004 VOL 140 ISS 23
FILE LAST UPDATED: 27 May 2004 (20040527/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 2 L3

=> d abs bib hitstr 1-2

10627991

9/16/04

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
 AB Aminophosphinic acid derive. were synthesized as potential inhibitors of renal dipeptidase, an enzyme overexpressed in benign and malignant colon tumors. Compds. were synthesized using the Wittig-Horner reaction. Several compds. showed potent and reversible enzyme-inhibitory activity. These stable mols. with tetrahedral phosphorus species mimic the tetrahedral intermediate of the reaction catalyzed by renal dipeptidase. These compds. can be used therapeutically and diagnostically for treatment and detection of tumors.

AN 2004:100920 CAPLUS

DN 140:141702

TI Design and synthesis of aminophosphinic acid derivatives as renal dipeptidase inhibitors and antitumor agents

IN Khan, Saeed R.; Vogelstein, Bert; Kinzler, Kenneth W.; Gurulingappa, Hallur; Buckhaults, Phillip

PA The Johns Hopkins School of Medicine, USA

SO PCT Int. Appl., 28 pp.

CODEN: PIIXD2

DT Patent

LA English

PAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 2004010846 | A2 | 20040205 | WO 2003-US23363 | 20030728 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, UU, UC, VN, YU, ZA, ZM, ZW, AM, AZ, BV, KG, KZ, MD, RU | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BP, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG | | | | |

US 2004091422 A1 20040513 US 2003-627991 20030728

PRAI US 2002-398653P P 20020727

US 2002-427266P P 20021118

US 2002-437270P P 20021230

OS MARPAT 140:141702

IT 533935-35-2P 533935-36-3P 533935-37-4P

533935-38-5P 653572-06-6P 653572-07-7P

653572-08-8P 653572-09-9P 653572-10-2P

653572-11-3P 653572-12-4P 653572-13-5P

653572-14-6P 653572-15-7P 653572-16-8P

653572-17-9P 653572-18-0P 653572-19-1P

653572-20-4P 653572-21-5P 653572-22-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Design and synthesis of aminophosphinic acid derivs. as renal dipeptidase inhibitors and antitumor agents)

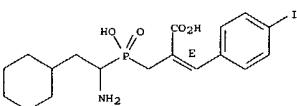
RN 533935-35-2 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-

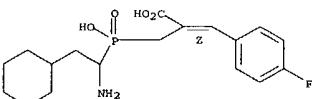
3-(4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



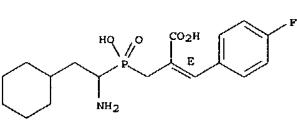
RN 653572-06-6 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



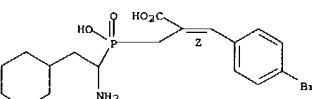
RN 653572-07-7 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-08-8 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(4-bromophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

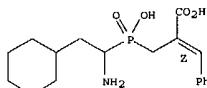
Double bond geometry as shown.



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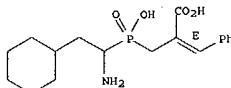
L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
 3-phenyl-, (2Z)- (9CI) (CA INDEX NAME) (Continued)

Double bond geometry as shown.



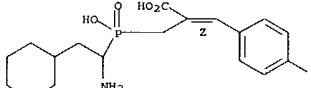
RN 533935-36-3 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 533935-37-4 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(4-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



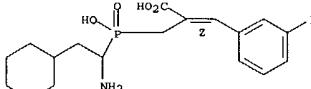
RN 533935-38-5 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(4-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

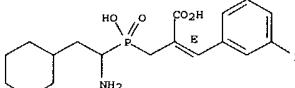
RN 653572-09-9 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(3-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



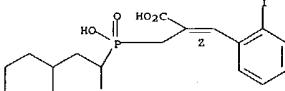
RN 653572-10-2 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(3-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-11-3 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(2-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

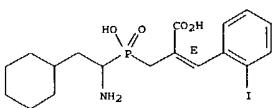


RN 653572-12-4 CAPLUS
 CN 2-Propenoic acid,
 2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
 3-(2-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

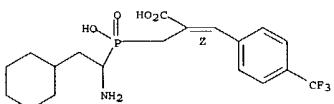
9/16/04

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



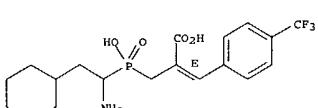
RN 653572-13-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-[4-(trifluoromethyl)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-14-6 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-[4-(trifluoromethyl)phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

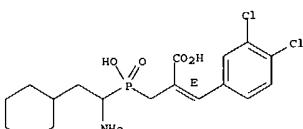


RN 653572-15-7 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3,4-dichlorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

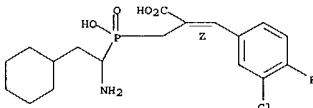
RN 653572-16-8 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(4-(3,4-dichlorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-17-9 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3-chloro-4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

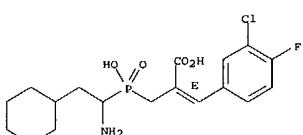
Double bond geometry as shown.



RN 653572-18-0 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3-chloro-4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

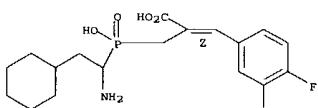
Double bond geometry as shown.

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



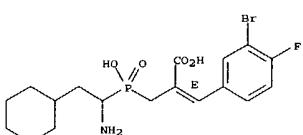
RN 653572-19-1 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3-bromo-4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-20-4 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3-bromo-4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

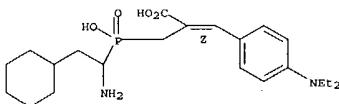
Double bond geometry as shown.



RN 653572-21-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-[4-(diethylamino)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

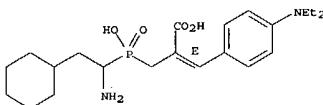
Double bond geometry as shown.

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 653572-22-6 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-[4-(diethylamino)phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

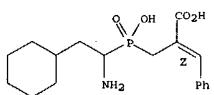


10627991

9/16/04

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AB Aminophosphinic acid derivs. were synthesized as potential inhibitors of renal dipeptidase (RDP), an enzyme over-expressed in benign and malignant colon tumors, and several compds. showed potent enzyme-inhibitory activity. In an example reaction, (E)-[BocNH(C6H11CH2)CH]P(O)(OMe)[CH2C(CO2Me)-CHPh] was prepared in two steps from [BocNH(C6H11CH2)CH]P(O)(OMe)H and hydrolyzed to (E)-[NH2(C6H11CH2)CH]P(O)(OH)[CH2C(CO2H)-CHPh].
AN 2003:114414 CAPLUS
DN 139:6950
TI Design, synthesis and evaluation of new RDP inhibitors
AU Gurulingappa, Hallur; Buckhaults, Phillip; Kumar, Srinivas K.; Kinzler, Kenneth W.; Vogelstein, Bert; Khan, Saeed R.
CS The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD, 21231, USA
SO Tetrahedron Letters (2003), 44 (9), 1871-1873
CODEN TELEAY ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
OS CASREACT 139:6950
IT 533935-35-2P 533935-36-3P 533935-37-4P
533935-38-5P
RL BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(RDP inhibition activity; stereoselective preparation and RDP inhibition activity of aminophosphinic acid deriv.)
RN 533935-35-2 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 533935-36-3 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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CN 2-Propenoic acid,

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3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

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CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-36-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-(4-iodophenyl)-,

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| | SINCE FILE ENTRY | TOTAL SESSION |
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FILE 'REGISTRY' ENTERED AT 16:15:58 ON 28 MAY 2004
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 21 S L1 FUL

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L4 2 S L3

FILE 'USPATFULL, USPAT2' ENTERED AT 16:16:53 ON 28 MAY 2004

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L5 0 L3

=> file uspatall
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L6 0 L3

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|--|------------------|---------------|
| FULL ESTIMATED COST | 6.24 | 175.36 |
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NEWS 17 AUG 27 BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
NEWS 18 SEP 01 INPADOC: New family current-awareness alert (SDI) available
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10627991

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ENTRY | TOTAL
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DICTIONARY FILE UPDATES: 14 SEP 2004 HIGHEST RN 744786-72-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

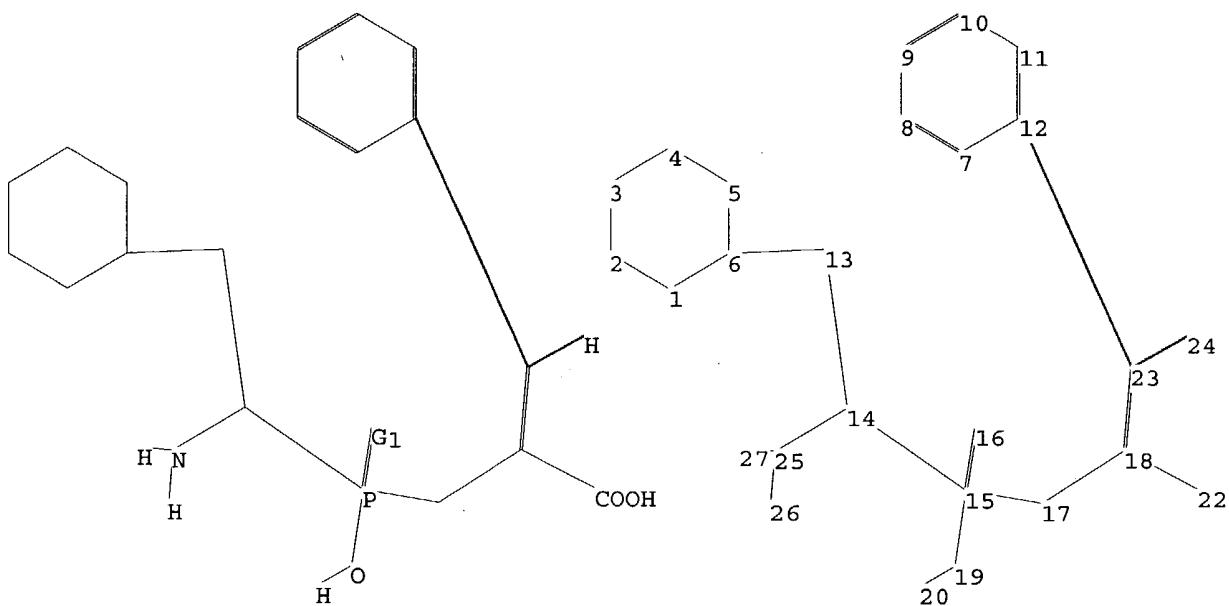
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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chain nodes :

13 14 15 16 17 18 19 20 22 23 24 25 26 27

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

6-13 12-23 13-14 14-15 14-25 15-16 15-17 15-19 17-18 18-22 18-23 19-20
23-24 25-26 25-27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-25 15-16 15-19

exact bonds :

6-13 12-23 13-14 14-15 15-17 17-18 18-22 18-23 19-20 23-24 25-26 25-27

normalized bonds :

7-8 7-12 8-9 9-10 10-11 11-12

/

G1:O,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

10627991

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 11:06:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3 TO ITERATE

100.0% PROCESSED 3 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3 TO 163
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 ful
FULL SEARCH INITIATED 11:06:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 47 TO ITERATE

100.0% PROCESSED 47 ITERATIONS 22 ANSWERS
SEARCH TIME: 00.00.01

L3 22 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 155.42 155.63

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FILE LAST UPDATED: 15 Sep 2004 (20040915/ED)

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=> s 13

10627991

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L4

3 L3

=> d abs bib hitstr 1-3

10627991

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L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AB Renal dipeptidase (RDP) is an enzyme overexpressed in benign and malignant

colorectal tumors. In an effort to identify potent inhibitors of this enzyme, aminophosphinic acid derivs. were synthesized.

$\text{C}_8\text{H}_{11}\text{CH}(\text{NH}_2)\text{P}(\text{O})(\text{OH})\text{CH}_2\text{C}(\text{CO}_2\text{H})\cdot\text{CH}_2\text{H}_2\text{R}_1\text{R}_2\text{R}_3$ (e.g., R₁ = R₂ = H, R₃ = 4-F, 3A and 4-Br 3c) in which the Ph ring was para substituted with F and Br and olefin with Z geometry, showed better inhibitory activity against RDP enzyme (IC_{50} = 5-6 nM).

AN 2004:465506 CAPLUS

DN 141:157215

TI Synthesis and evaluation of aminophosphinic acid derivatives as inhibitors of renal dipeptidase

AU Gurulingappa, Hallur; Buckhalter, Phillip; Kinzler, Kenneth W.; Vogelstein, Bert; Khan, Saeed R.

CS The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD, 21231, USA

SO Bioorganic & Medicinal Chemistry Letters (2004), 14(13), 3531-3533 CODEN: BMCLEB; ISSN: 0960-894X

PB Elsevier Science B.V.

DT Journal

LA English

IT 533935-37-4P 533935-38-5P 653572-06-6P

653572-07-7P 653572-08-8P 653572-09-9P

653572-10-2P 653572-11-3P 653572-12-4P

653572-13-5P 653572-14-6P 653572-15-7P

653572-16-8P 653572-17-9P 653572-18-0P

653572-19-1P 653572-20-4P 653572-21-5P

653572-22-6P 728032-33-5P

RL: PA (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIO (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminophosphinic acid derivs. as renal dipeptidase

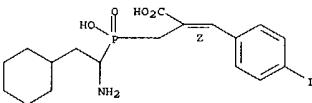
inhibitors from Wittig-Horner olefination with aromatic aldehydes of intermediate made from protected amino(cyclohexylethyl)phosphinate and trimethylphosphonoacrylate)

RN 533935-37-4 CAPLUS

CN 2-Propenoic acid,

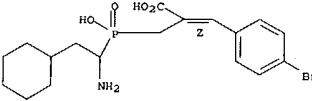
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(4-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

Double bond geometry as shown.

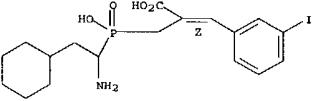


RN 653572-09-9 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(3-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

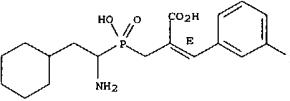


RN 653572-10-2 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(3-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

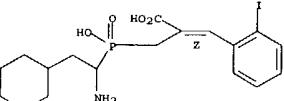


RN 653572-11-3 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(2-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



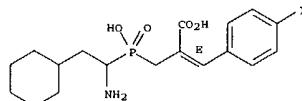
L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

RN 533935-38-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(4-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

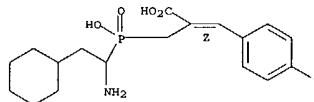


RN 653572-06-6 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

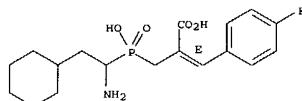


RN 653572-07-7 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



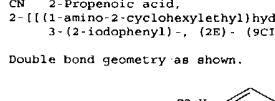
RN 653572-08-8 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(4-bromophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

Double bond geometry as shown.

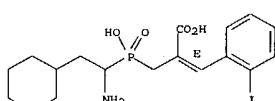


RN 653572-12-4 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(2-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

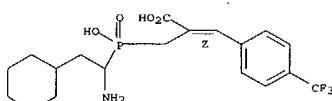


RN 653572-13-5 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-[4-(trifluoromethyl)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

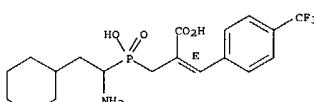


RN 653572-14-6 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-[4-(trifluoromethyl)phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-15-7 CAPLUS

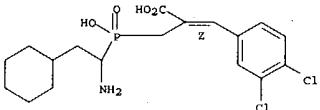
CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-3-(3,4-dichlorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

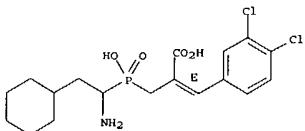
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L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



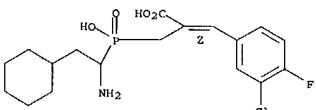
RN 653572-16-8 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(3,4-dichlorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-17-9 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(3-chloro-4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

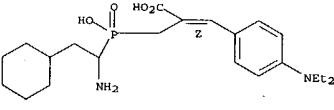


RN 653572-18-0 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(3-chloro-4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

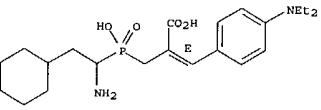


L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



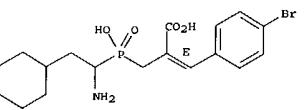
RN 653572-22-6 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(4-(diethylamino)phenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



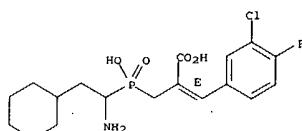
RN 728033-33-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(4-bromophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



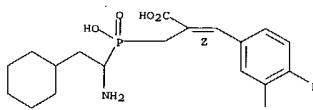
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



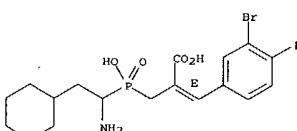
RN 653572-19-1 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(3-bromo-4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-20-4 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(3-bromo-4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-21-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-[4-(diethylamino)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
AB Aminophosphinic acid derivs. were synthesized as potential inhibitors of renal dipeptidase, an enzyme overexpressed in benign and malignant colon tumors. Compds. were synthesized using the Wittig-Horner reaction. Several compds. showed potent and reversible enzyme-inhibitory activity. These stable molts. with tetrahedral phosphorus species mimic the tetrahedral intermediate of the reaction catalyzed by renal dipeptidase. These compds. can be used therapeutically and diagnostically for treatment and detection of tumors.

AN 2004:100920 CAPLUS
DN 140:141702
TI Design and synthesis of aminophosphinic acid derivatives as renal dipeptidase inhibitors and antitumor agents
IN Khan, Saeed R.; Vogelstein, Bert; Kinzler, Kenneth W.; Gurulingappa, Hallur; Buckhaults, Phillip
PA The Johns Hopkins School of Medicine, USA
SO PCT Int. Appl. 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI WO 2004010846 A2 20040205 WO 2003-US23363 20030728
WO 2004010846 A3 20040812
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US 2004091422 A1 20040513 US 2003-627991 20030728
PRAI US 2002-398653P P 20020727
US 2002-427266P P 20021118
US 2002-437270P P 20021230
OS MARPAT 140:141702
IT 533935-35-29 533935-36-39 533935-37-49
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653572-08-89 653572-09-99 653572-10-29
653572-11-39 653572-12-49 653572-13-59
653572-14-69 653572-15-79 653572-16-89
653572-17-99 653572-18-09 653572-19-19
653572-20-49 653572-21-59 653572-22-69
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(design and synthesis of aminophosphinic acid derivs. as renal dipeptidase inhibitors and antitumor agents)

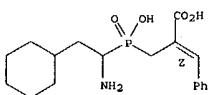
RN 533935-35-2 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-phenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

10627991

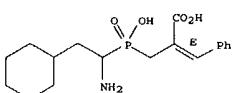
9/16/04

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



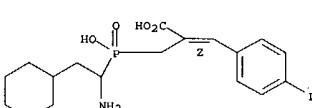
RN 533935-36-3 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 533935-37-4 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

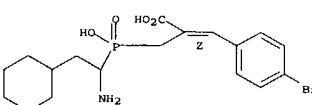


RN 533935-38-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

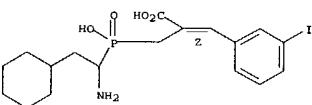


L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



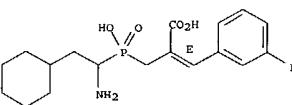
RN 653572-09-9 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(3-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



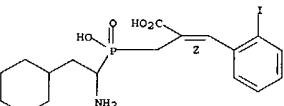
RN 653572-10-2 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(3-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

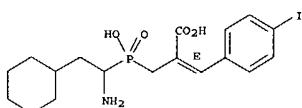


RN 653572-11-3 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(2-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

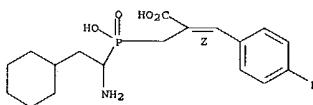


L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



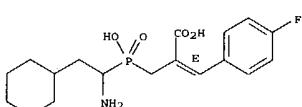
RN 653572-06-6 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-07-7 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



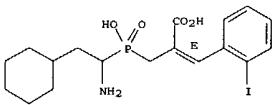
RN 653572-08-8 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-bromophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

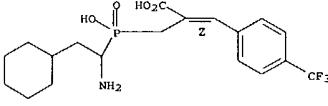
RN 653572-12-4 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(2-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



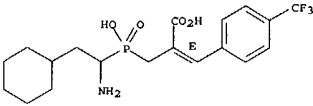
RN 653572-13-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-(trifluoromethyl)phenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-14-6 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(4-(trifluoromethyl)phenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-15-7 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl)-
3-(3,4-dichlorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

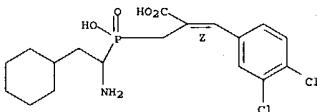
Double bond geometry as shown.



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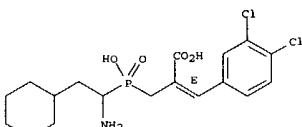
9/16/04

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



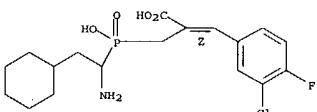
RN 653572-16-8 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3,4-dichlorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-17-9 CAPLUS
CN 2-Propenoic acid,
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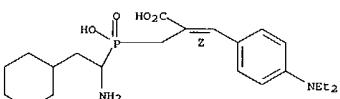
Double bond geometry as shown.



RN 653572-18-0 CAPLUS
CN 2-Propenoic acid,
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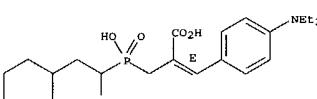
Double bond geometry as shown.

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

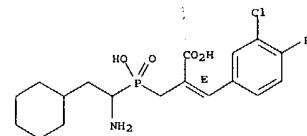


RN 653572-22-6 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-[4-(diethylamino)phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

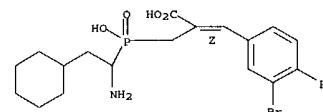


L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



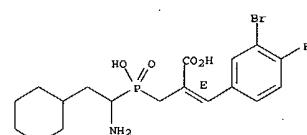
RN 653572-19-1 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3-bromo-4-fluorophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-20-4 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-(3-bromo-4-fluorophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 653572-21-5 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-[4-(diethylamino)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AB Aminophosphinic acid derivs. were synthesized as potential inhibitors of renal dipeptidase (RDP), an enzyme over-expressed in benign and malignant colon tumors, and several compds. showed potent enzyme-inhibitory activity. In an example reaction, (E)-[BocNH(C6H11CH2)CH]P(O)(OMe)[CH2C(C(=O)2Me):CHPh] was prepared in two steps from [BocNH(C6H11CH2)CH]P(O)(OMe)H and

hydrolyzed to (E)-[NH2-C6H11CH2)CH]P(O)(OH)[CH2C(CO2H):CHPh].

AN 2003:114414 CAPLUS

DN 139:6950

TI Design, synthesis and evaluation of new RDP inhibitors

AU Gurulingappa, Hallur; Buckhaults, Phillip; Kumar, Srinivas K.; Kinzler, Kenneth W.; Vogelstein, Bert; Khan, Saeed R.

CS The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore,

MD, 21231, USA

SO Tetrahedron Letters (2003), 44 (9), 1871-1873

CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier Science Ltd.

DT Journal

IA English

OS CASREACT 139:6950

IT 533935-35-2P 533935-36-3P 533935-37-4P

533935-38-5P

RL BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(RDP inhibition activity; stereoselective preparation and RDP inhibition

activity of aminophosphinic acid derivs.)

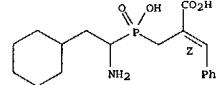
RN 533935-35-2 CAPLUS

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-

3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



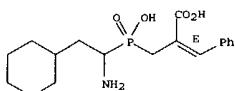
RN 533935-36-3 CAPLUS
CN 2-Propenoic acid,
2-[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl-
3-phenyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

10627991

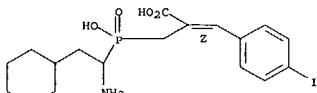
9/16/04

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



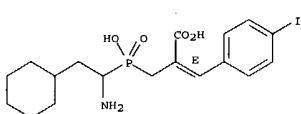
RN 533935-37-4 CAPLUS
CN 2-Propenoic acid,
2-[[[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(4-iodophenyl)-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 533935-38-5 CAPLUS
CN 2-Propenoic acid,
2-[[[(1-amino-2-cyclohexylethyl)hydroxyphosphinyl]methyl]-
3-(4-iodophenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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9/16/04

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COST IN U.S. DOLLARS

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ENTRY | TOTAL
SESSION |
|---------------------|---------------------|------------------|
| FULL ESTIMATED COST | 15.16 | 170.79 |

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| | SINCE FILE
ENTRY | TOTAL
SESSION |
|---------------------|---------------------|------------------|
| CA SUBSCRIBER PRICE | -2.10 | -2.10 |

FILE 'USPATFULL' ENTERED AT 11:07:48 ON 16 SEP 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 11:07:48 ON 16 SEP 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l3
L5 1 L3

=> d abs bib fhitstr

10627991

9/16/04

LS ANSWER 1 OF 1 USPATFULL on STN
AB Aminophosphinic acid derivatives were synthesized as potential inhibitors of renal dipeptidase, an enzyme overexpressed in benign and malignant colon tumors. Several compounds showed potent enzyme-inhibitory activity. These compounds can be used therapeutically and diagnostically for treatment and detection of tumors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2004120017 USPATFULL

TI Design and synthesis of renal dipeptidase inhibitors

IN Khan, Saeed R., Owings Mills, MD, UNITED STATES

Vogelstein, Bert, Baltimore, MD, UNITED STATES

Kinzler, Kenneth W., Bel Air, MD, UNITED STATES

Gurulingappa, Hallur, Baltimore, MD, UNITED STATES

Buckhaults, Phillip, Columbia, SC, UNITED STATES

PA The Johns Hopkins University, Baltimore, MD, UNITED STATES (U.S. corporation)

PI US 2004051422 AI 20040513

AI US 2003-627991 AI 20030728 (10)

PRAI US 2002-437270P 20021230 (60)

US 2002-427266P 20021118 (60)

US 2002-398653P 20020727 (60)

DT Utility

PS Application

LRGP BANNER & WITCOFF, 1001 G STREET N W, SUITE 1100, WASHINGTON, DC, 20001

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN 5 Drawing Page(s)

LN CNT 510

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 533935-35-2P

(design and synthesis of aminophosphinic acid derivs. as renal

dipeptidase inhibitors and antitumor agents)

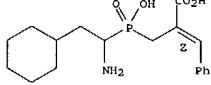
RN 533935-35-2 USPATFULL

CN 2-Propenoic acid,

2-[(1-amino-2-cyclohexylethyl)hydroxyporphinyl]methyl-

3-phenyl-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



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=> logoff y
COST IN U.S. DOLLARS

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